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CLAIMS

I claim:

1. A DNA vaccine, comprising:

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at least one genetic sequence encoding a mutant ADP-ribosyltransferase toxin (mART); and

at least one genetic sequence encoding an antigen.

2. The DNA vaccine of claim 1 wherein said mART is derived from a cholera toxin.

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3. The DNA vaccine of claim 1 wherein said mART is derived from a pertussis toxin.

4. The DNA vaccine of claim 1 wherein said mART is derived from a heat labile toxin of enterotoxigenic *Escherichia coli*.

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5. The DNA vaccine of claim 1 wherein said mART includes a mutation selected from the group consisting of R7K, R13H, E29H, H35R, L41F, F50S, S61K, S63K, S63Y, V53D, V97K, Y104K, P106S, H171Y, and combinations thereof.

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6. The DNA vaccine of claim 1 further comprising an expression vector, said at least one genetic sequence encoding said mART is associated with said expression vector.

7. The DNA vaccine of claim 6 wherein said at least one genetic sequence encoding said antigen is associated with said expression vector.

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8. The DNA vaccine of claim 7 further comprising an internal ribosome entry site positioned between said at least one genetic sequence encoding said mART and said at least one genetic sequence encoding said antigen.

9. The DNA vaccine of claim 6 wherein said expression vector is a eukaryote.

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- 5 10. The DNA vaccine of claim 9 further comprising at least one eukaryote promoter sequence associated with said expression vector.
11. The DNA vaccine of claim 10 wherein there are at least two eukaryote promoter sequences associated with said expression vector.
- 10 12. The DNA vaccine of claim 6 wherein said at least one genetic sequence encoding said antigen is associated with a second expression vector that is separate from said expression vector associated with said at least one genetic sequence encoding a mART.
- 15 13. The DNA vaccine of claim 1 wherein said antigen is bacterial.
14. The DNA vaccine of claim 1 wherein said antigen is viral.
15. A vaccine composition, comprising:
- 20 an antigen; and
- at least one genetic sequence encoding a mutant ADP-ribosyltransferase toxin (mART).
16. A vaccine composition, comprising:
- 25 a DNA vaccine that expresses an antigen; and
- at least one genetic sequence encoding a mutant ADP-ribosyltransferase toxin (mART).
17. A method of vaccinating a patient, comprising:
- 30 introducing into said patient at least one genetic sequence encoding a mutant ADP-ribosyltransferase toxin (mART) and at least one genetic sequence encoding an antigen;
- expressing said mART and said antigen after said introducing step.
- 35 18. The method of claim 1 wherein said step of introducing is accomplished using an expression vector which both said genetic sequence encoding said mART and said genetic sequence encoding said antigen are associated with.

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19. The method of claim 18 wherein said expression vector includes at least two eukaryote promoters.

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20. The method of claim 18 wherein said expression vector includes an internal ribosome entry site positioned between said at least one genetic sequence encoding said mART and said at least one genetic sequence encoding said antigen.